

ABSTRACT

2 A vehicle surroundings monitoring apparatus inputs
3 images taken by a stereoscopic camera, vehicle speeds, steering
4 wheel rotation angles, yaw rates and ON-OFF signals of a turn
5 signal switch. An own traveling path C is calculated from an own
6 traveling path A obtained from lane markers and side walls and
7 an own traveling path B obtained from yaw rates of the own vehicle.
8 Further, a new own traveling path E is calculated from the own
9 traveling path C and a trace of a preceding vehicle, in case where
10 there is no possibility of evacuation of the preceding vehicle
11 and the turn signal switch is turned off and the absolute value
12 of the steering wheel rotation angle is smaller than a specified
13 value and a present own traveling path is calculated from the
14 own traveling path E and the previous own traveling path. In other
15 cases, the present own traveling path is calculated from the own
16 traveling path C and the previous own traveling path.

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